

## Message

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**Sent:** 4/29/2019 3:48:45 PM  
**Subject:** lowerline draft action memo.docx  
**Attachments:** lowerline draft action memo.docx

With regard to whether Radium-226 is a hazardous substance versus a pollutant or contaminant: Part 302.4 includes Radionuclides and then in Appendix B, the radionuclides are listed with specific RQs, etc.. I'd suggest the following addition in red.

Radium-226 is a radionuclide and a hazardous substance according to section 101(14) of CERCLA, 42 U.S.C. § 9601(14) and 40 C.F.R. § 302.4, specifically Appendix B. *See* Attachment 2, Material Safety Data Sheet for Radium.

Legal Information Institute [LII]

131 > Electronic Code of Federal Regulations (e-CFR) > Title 40: Protection of Environment > Chapter I: ENVIRONMENTAL PROTECTION AGENCY > Subchapter 3: SUPERFUND, SPILL RESPONSE, PLANNING, AND COMMUNITY RIGHT-TO-KNOW PROGRAMS > Part 302. DESIGNATION, REPORTABLE QUANTITIES, AND NOTIFICATION > Section 302.4. Designation of Hazardous substances.

Protactinium-226	91	18 (3.7E-11)
Protactinium-230	91	18 (3.7E-11)
Protactinium-231	91	0.01 (3.7E-8)
Protactinium-232	91	18 (3.7E-11)
Protactinium-233	91	18% (3.7E-12)
Protactinium-234	91	18 (3.7E-11)
Radium-226	89	1 (3.7E-10)
Radium-228	88	18 (3.7E-11)
Radium-229	88	1 (3.7E-10)
Radium-230	88	18% (3.7E-12)
Radium-232	88	18% (3.7E-12)
Radium-234	88	0.1 (3.7E-9)
Radium-236	86	0.1 (3.7E-9)
Radium-238	86	0.1 (3.7E-9)
Rhenium-187	75	18% (3.7E-12)
Rhenium-188	75	18% (3.7E-12)
Rhenium-189	75	18% (3.7E-12)
Rhenium-190	75	18% (3.7E-12)
Rhenium-191	75	18% (3.7E-12)
Rhenium-192 (12.7 hr)	75	18 (3.7E-11)
Rhenium-192 (64.0 hr)	75	18 (3.7E-11)
Rhenium-194m	75	18 (3.7E-11)
Rhenium-194	75	18 (3.7E-11)

If there is a question bou